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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,151	01/10/2002	Paul Augustus Thomas III	2079.007000	1125

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EXAMINER

DU, THUAN N

ART UNIT

PAPER NUMBER

2116

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,151

Applicant(s)

THOMAS, PAUL AUGUSTUS

Examiner

Thuan N. Du

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-12 and 20-24 is/are allowed.
- 6) ☒ Claim(s) 1-7, 13-19 and 25-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040916.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: IDS (dated 9/16/04).
2. Claims 1-31 are presented for examination.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Holm et al. [Holm] (U.S. Patent No. 6,820,164).
5. Regarding claim 1, Holm teaches a method of controlling the initialization of devices at system startup comprising the step of creating one or more levels of device tree nodes branching from a root node (PHB 104, 105, or 106) [Fig. 1; col. 25, lines 37-52]. However, it is seen that, in Fig. 1, Holm shows the number of levels of device tree nodes is 2 (MFDs 108, 109 and devices 110, 112 are at level 1 and devices 114 are at level 2). Additionally, Holm shows that, also in Fig. 1, a recursion depth is 2 (PHB and MFD). Therefore, Holm teaches the number of levels of device tree nodes is equal to a recursion depth.

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6. Regarding claim 13, Holm teaches the claimed method steps. Therefore, Holm teaches the instructions stored in a machine-readable media for carrying out the claimed method steps.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-7, 14-19 and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holm et al. [Holm] (U.S. Patent No. 6,820,164).

9. Regarding claims 2 and 14, Holm does not explicitly teach that the recursion depth is a property published by the root node and the one or more levels of devices tree nodes. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the recursion depth in the property published by the root node and the one or more levels of devices tree nodes because it would reduce the initialization time of the system.

10. Regarding claims 3 and 7, Holm teaches a method of controlling the initialization of devices at system startup comprising the steps of:

incrementing a recursion level (when the connected device is detected to be a MFD, the process continues at the MFD level. Therefore, the recursion level is incremented to another level) [col. 26, lines 53-54, 63-65]; and

creating a level of device tree nodes branching from a root node or another level of device tree nodes [col. 26, line 66 to col. 27, line 7].

Holm does not explicitly teach that the recursion level is less than a recursion depth.

However, it would have been obvious to one of ordinary skill in the art to recognize that in order for the recursion level to be incremented, the recursion level should be less than the recursion depth.

11. Regarding claim 4, Holm teaches that the method further comprising the step of initializing the recursion level at the root node to zero [col. 26, lines 13-24].

12. Regarding claim 5, Holm does not explicitly teach that the recursion depth is a property published by the root node and the one or more levels of devices tree nodes. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the recursion depth in the property published by the root node and the one or more levels of devices tree nodes because it would reduce the initialization time of the system.

13. Regarding claim 6, Holm teaches that the level of device tree nodes inherits the recursion level from its parent node [Fig. 1].

14. Regarding claims 15-19, Holm teaches the claimed method steps. Therefore, Holm teaches the instructions stored in a machine-readable media for carrying out the claimed method steps.

15. Regarding claims 25-31, Holm teaches the claimed method steps. Therefore, Holm teaches the apparatus to implement the claimed method steps.

Allowable Subject Matter

16. Claims 8-12 and 20-24 allowed.

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17. The following is an examiner's statement of reasons for allowance: Applicant's claimed invention distinguishes over the prior art for the following reasons. The claims are allowable over the prior art of record because none of the references, either alone or in combination, discloses or renders obvious, among other things, a method of controlling recursion at system startup including the step of comparing a recursion level to a recursion depth and discontinuing the process of incrementing the recursion level and creating the level of device tree nodes in response to the recursion level being equal to the recursion depth.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan N. Du whose telephone number is (571) 272-3673. The examiner can normally be reached on Monday and Wednesday-Friday: 10:00 AM - 8:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (571) 272-3670.

Central TC telephone number is (571) 272-2100.

The fax number for the organization is (703) 872-9306.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

A handwritten signature in black ink, appearing to read 'Tuan N. Du', with a stylized flourish at the end.

Tuan N. Du
December 8, 2004